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Please cancel Claims 78-83.

Claims 1-42 (Previously Canceled)

Claims 43-71 (Previously Canceled)

72. (Previously Presented) A method of providing hazardous incident decision support and training, comprising:

acquiring observed signs and symptoms data from a user interface, wherein said data is input by a user to describe a given situation or condition which may or may not be associated with a hazardous incident;

acquiring agent characteristic data from records in a database, wherein each record includes data representative of a known hazardous agent; and

performing an initial agent identification by comparing the observed signs and symptoms acquired from the user interface with the agent characteristics data for each record in the database, wherein said performing an initial agent identification by comparing the observed signs and symptoms acquired from the user interface with the agent characteristics data for each record in the database comprises using the following algorithm: Agent Identification = $Max [W_1 \cdot (number \ of \ matched \ Signs) + W_2 \cdot (number \ of \ matched \ Symptoms) + W_3 \cdot (number \ of \ matched \ Times-of-Onset) - W_4 \cdot (number \ of \ Mismatches)], wherein W represents the relative weights given to corresponding matches or mismatches, and Max represents a process in which the result or score obtained from applying the foregoing algorithm to each record in said database is evaluated to determine the record with the greatest numerical value.$

73. (Previously Presented) The method of claim 72, wherein said observed signs data includes one or more of color, odor, chemical reaction, dispersion devices, explosive event, property damage, dead animals, or absence of signs, and wherein said observed symptoms data includes one or more of nausea, headache, tunnel vision, chest pain, vomiting, runny nose, reddish skin, or absence of symptoms.

74. (Previously Presented) A method of providing hazardous incident decision support and training, comprising:

acquiring observed signs and symptoms data from a user interface, wherein said data is input by a user to describe a given situation or condition which may or may not be associated with a hazardous incident;

acquiring agent characteristic data from records in a database, wherein each record includes data representative of a known hazardous agent; and

performing an initial agent identification by comparing the observed signs and symptoms acquired from the user interface with the agent characteristics data for each record in the database, wherein said performing an initial agent identification by comparing the observed signs and symptoms acquired from the user interface with the agent characteristics data for each record in the database comprises using the following algorithm: Agent Identification = Max $[W_1 \cdot (number \text{ of matched Signs}) + W_2 \cdot (number \text{ of matched Symptoms}) + W_3 \cdot (number \text{ of matched Times-of-Onset}) - W_4 \cdot (number \text{ of Mismatches}) + W_5 \cdot (Sensor Input) + W_6 \cdot (Sampling Data)], wherein W represents the relative weights given to corresponding matches or mismatches, and Max represents a process in which the result or score obtained from applying the foregoing algorithm to$

each record in said database is evaluated to determine the record with the greatest numerical value.

75. (Previously Presented) The method of claim 74, wherein said observed signs data includes one or more of color, odor, chemical reaction, dispersion devices, explosive event, property damage, dead animals, or absence of signs, and wherein said observed symptoms data includes one or more of nausea, headache, tunnel vision, chest pain. vomiting, runny nose, reddish skin, or absence of symptoms.

76. (Previously Presented) A method of providing hazardous incident decision support and training, comprising:

acquiring observed signs and symptoms data from a user interface, wherein said data is input by a user to describe a given situation or condition which may or may not be associated with a hazardous incident;

acquiring agent characteristic data from records in a database, wherein each record includes data representative of a known hazardous agent; and

performing an initial agent identification by comparing the observed signs and symptoms acquired from the user interface with the agent characteristics data for each record in the database, wherein said performing an initial agent identification by comparing the observed signs and symptoms acquired from the user interface with the agent characteristics data for each record in the database comprises using the following algorithm: Agent Identification = Max [W₁ • (number of matched Signs) + W₂ • (number of matched Symptoms) + W₃ • (number of matched Times-of-Onset) - W₄ • (number of

Mismatches) + $W_5 \cdot (Sensor Input) + W_6 \cdot (Sampling Data) + W_7 \cdot (Time Data) + W_8 \cdot$ (Intelligence) + W₉ • (Number of Casualties) + W₁₀ • (Distribution of Casualties) + W₁₁ • (MET Data)], wherein W represents the relative weights given to corresponding matches or mismatches, and Max represents a process in which the result or score obtained from applying the foregoing algorithm to each record in said database is evaluated to determine the record with the greatest numerical value.

77. (Previously Presented) The method of claim 76, wherein said observed signs data includes one or more of color, odor, chemical reaction, dispersion devices, explosive event, property damage, dead animals, or absence of signs, and wherein said observed symptoms data includes one or more of nausea, headache, tunnel vision, chest pain, vomiting, runny nose, reddish skin, or absence of symptoms.

Claims 78-83 (Canceled)